

March 31, 1953

R. A. CLARIDGE ET AL
COVER AND ITS MANUFACTURE

2,633,286

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2 SHEETS—SHEET 1

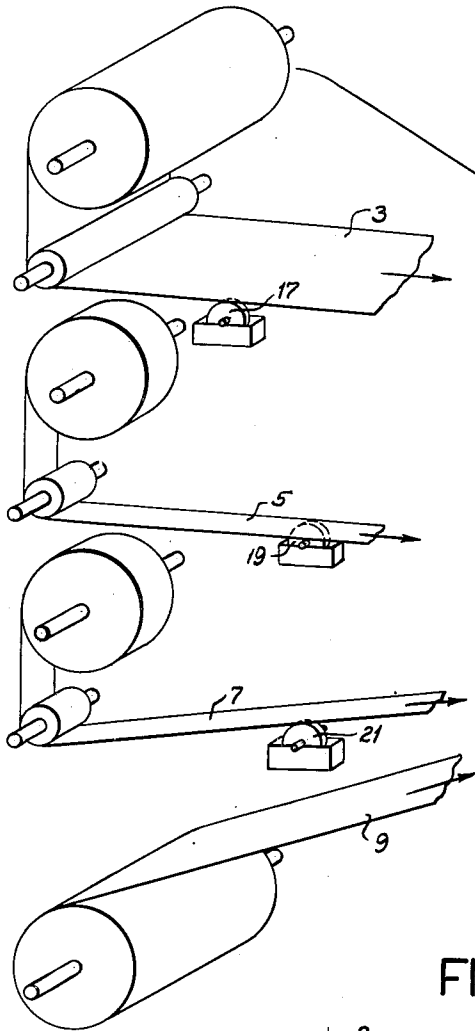


FIG. 1.

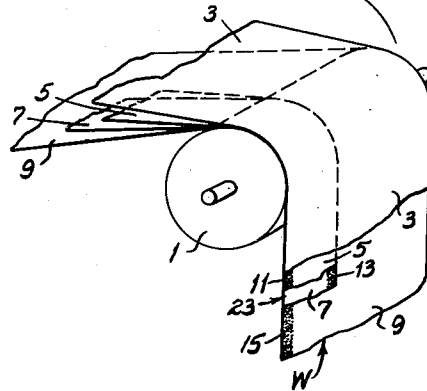


FIG. 2.

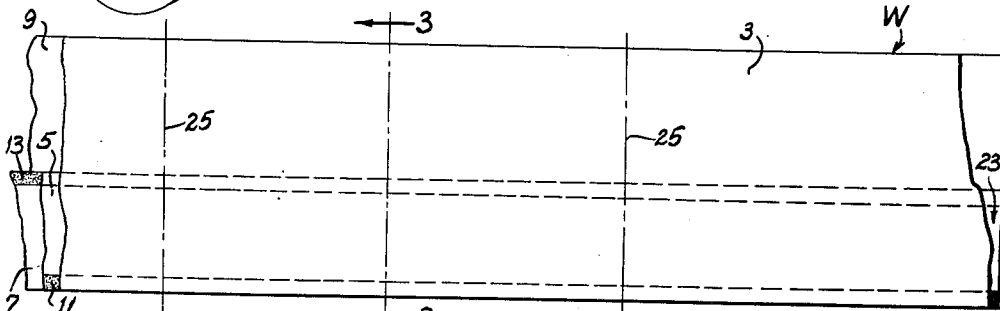
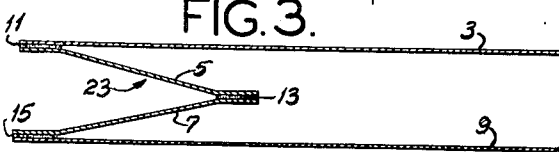


FIG. 3.



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FIG. 6.

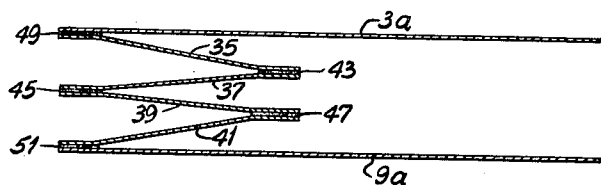


FIG. 4.

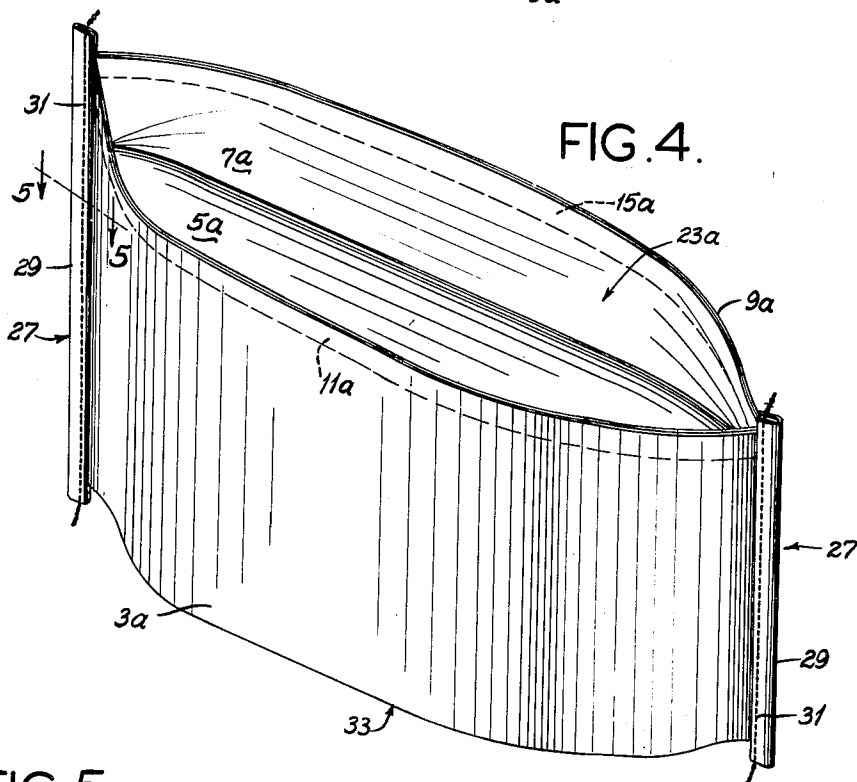
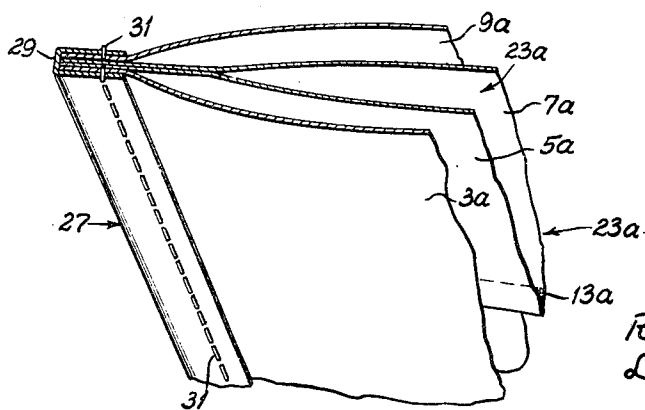


FIG. 5.



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UNITED STATES PATENT OFFICE

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COVER AND ITS MANUFACTURE

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7 Claims. (Cl. 229-53)

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This invention relates to covers and their manufacture, and more particularly to covers such as are used for covering furniture and other relatively large items, and the manufacture of such covers.

The object of the invention is the provision of gusseted covers in sizes large enough to cover relatively large objects, such as large articles of furniture, which may be simply and economically manufactured of webs of flexible sheet material, such as paper, of widths which are more readily available and convenient to handle. In general, a cover of this invention comprises two superposed sheets of flexible sheet material such as paper, having their marginal edges substantially coincident. The sheets are joined together along two opposite sides of the cover by closure seams and joined along a third side by a gusset which lies flat between the superposed sheets when folded. The ends of the gusset are caught in the closure seams. The cover is open along the fourth side. The gusset may have two sides or panels or any even number of sides or panels greater than two. The gusset is made up of separate strips of flexible sheet material, each strip constituting one panel of the gusset, the strips being seamed together and to the sheets along the lines where the gusset folds. The cover is made by combining continuous separate webs or strips in such manner as to form a continuous composite web consisting of two superposed outer strips connected along one side margin by a continuous gusset lying flat between the outer strips and itself consisting of superposed strips seamed together and to the outer strips along the lines where the gusset folds. This composite web is segmented into individual cover lengths by cutting it transversely to the gusset at intervals corresponding to cover lengths, and finally the individual cover lengths are seamed at their two sides transverse to the gusset. Other features will be in part apparent and in part pointed out hereinafter.

The invention accordingly comprises the elements and combinations of elements, steps and sequence of steps, features of construction and manipulation, and arrangements of parts which will be exemplified in the structures and methods hereinafter described, and the scope of the application of which will be indicated in the following claims.

In the accompanying drawings, in which several of various possible embodiments of the invention are illustrated,

Fig. 1 is a diagrammatic perspective view illus-

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trating initial steps in the manufacture of one form of the covers of this invention;

Fig. 2 is a plan view of a composite web formed in the manner illustrated in Fig. 1 and illustrating a further step in the manufacture;

Fig. 3 is an enlarged transverse section taken on line 3-3 of Fig. 2, with parts of the web spread apart;

Fig. 4 is a perspective view of a completed cover spread open;

Fig. 5 is an enlarged fragmentary perspective view in section on line 5-5 of Fig. 4; and,

Fig. 6 is a view similar to Fig. 3 illustrating a modification.

Similar reference characters indicate corresponding parts throughout the several views of the drawings.

Referring to the drawings, Fig. 1 illustrates the manufacture of a composite web W from which covers of this invention are made. At 1 is shown a combining roll at which four superposed strips 3, 5, 7 and 9 of flexible sheet material, such as kraft paper, are combined to form the continuous web W from which covers are ultimately formed. Strips 5 and 7 are narrower than strips 3 and 9 and are disposed between the latter at one lateral margin thereof. As shown, strips 3 and 9 are of equal width, and strips 5 and 7 are of equal width. The strips are pulled from rolls thereof over the combining roll 1 with the side edges of strips 3 and 9 in alignment or substantially so, and with the side edges of strips 5 and 7 in alignment or substantially so, and with one side edge of each of strips 5 and 7 aligned or substantially aligned with one side edge of each of strips 3 and 9. As the strips travel to the combining roll, adhesive is applied to the strips in such manner that, at the combining roll 1, the opposed margins of strips 3 and 5 become adhered flatwise at 11, the inner opposed margins of strips 5 and 7 become adhered flatwise at 13, and the opposed margins of strips 7 and 9 become adhered flatwise at 15. As shown in Fig. 1, the adhesive may be applied by a coating roll 17 located to apply adhesive to the inside of the margin of strip 3, another coating roll 19 located to apply adhesive to the face of the transversely inner margin of the strip 5 opposed to the strip 7, and another coating roll 21 located to apply adhesive to the face of the transversely outer margin of strip 7 opposed to the strip 9.

The composite web W formed at the combining roll, as more particularly illustrated in Figs. 2 and 3, consists of the outer strips 3 and 9 connected along one margin by the gusset 23 formed

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by strips 5 and 7. It will be seen that each of strips 5 and 7 forms one panel of the gusset and that strips 5 and 7 are seamed together at 13 and are seamed to the strips 3 and 9 at 11 and 15, respectively, along the lines where the gusset folds. To form covers of this invention from the web W, the web is segmented into cover lengths by cutting it transversely on lines 25 (Fig. 2) spaced at intervals corresponding to cover lengths. Then, each cover length is seamed at its two sides transverse to the gusset formed by the cutting.

Figs. 4 and 5 illustrate the resultant cover. It will be seen that the cover consists of two superposed flat rectangular sheets 3a and 9a, which are segments of the original strips 3 and 9, the edges of the sheets being substantially coincident. The sheets are joined together along two opposite sides of the cover by closures 27 and along a third side by a gusset 23a, which is a segment of the original gusset 23. This gusset when folded lies flat between the superposed sheets 3a and 9a, and its ends are caught in the seams 27. The latter, as illustrated, are formed by folding tapes 29, such as paper tapes, around the sides of the sheets and sewing a seam 31 through the tapes and side margins of the sheets. Other suitable seams may be used. The cover is open along its fourth side at 33. The gusset consists of superposed separate flat strips 5a and 7a, which are segments of the original continuous flat strips 5 and 7, seamed together flatwise by adhesive at 13a and to the sheets 3a and 9a at 11a and 15a, respectively, along the lines where the gusset folds.

Fig. 6 illustrates a modification wherein the gusset has four panels instead of two. The outer sheets are the same as in the Fig. 4 form and are again designated 3a and 9a. The panels of the gusset are designated 35, 37, 39 and 41. Panels 35 and 37 are seamed together along their inner margin by adhesive 43. Panels 37 and 39 are seamed together along their outer margin by adhesive 45. Panels 39 and 41 are seamed together along their inner margin by adhesive 47. Panel 35 is seamed along its outer margin to the margin of sheet 3a at 49, and panel 41 is seamed along its outer margin to the margin of sheet 9a at 51. It will be understood that the Fig. 6 cover is otherwise made like the Fig. 4 cover, and that in its manufacture, four gusset strips are sandwiched in between outer strips 3 and 9 instead of two as in Fig. 1. It will be understood that within reasonable limits, the gusset may have any even number of panels greater than four.

In view of the above, it will be seen that the several objects of the invention are achieved and other advantageous results attained.

As many changes could be made in the above constructions and methods without departing from the scope of the invention, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted as illustrative and not in a limiting sense.

We claim:

1. A cover particularly for use to cover relatively large objects, such as large articles of furniture, comprising two superposed flat rectangular sheets of flexible sheet material having their edges substantially coincident, said sheets being seamed together along two opposite sides of the cover and joined along a third side by a gusset adapted when folded to lie flat between the sheets, the ends of the gusset being caught in said seams, the cover being open along its fourth side, the gusset consisting of superposed separate individ-

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ual flat strips of flexible sheet material of width less than the dimension of the sheets transverse to the gusset, said strips being seamed together and to the sheets flatwise along the lines where the gusset folds.

2. A cover particularly for use to cover relatively large objects, such as large articles of furniture, comprising two superposed flat rectangular sheets of flexible sheet material having their edges substantially coincident, said sheets being seamed together along two opposite sides of the cover and joined along a third side by a gusset adapted when folded to lie flat between the sheets, the ends of the gusset being caught in said seams, the cover being open along its fourth side, the gusset consisting of superposed separate individual flat strips of flexible sheet material each forming one panel of the gusset, the strips being of a width less than the dimension of the sheets transverse to the gusset, and being seamed together and to the sheets flatwise along the lines where the gusset folds by adhesive between the opposed marginal faces of the respective strips and sheets.

3. A cover particularly for use to cover relatively large objects, such as large articles of furniture, comprising two superposed flat paper sheets having their edges substantially coincident, said sheets being seamed together along two opposite sides of the cover and joined along a third side by a gusset adapted when folded to lie flat between the sheets, the ends of the gusset being caught in said seams, the cover being open along its fourth side, the gusset consisting of two flat paper strips narrower than the sheets, each one extending the full length of the gusset and forming a panel of the gusset, the strips being superposed and seamed together flatwise along their inner margin at the inner fold of the gusset and seamed flatwise to the margins of the respective sheets at said third side of the cover.

4. A cover particularly for use to cover relatively large objects, such as large articles of furniture, comprising two superposed flat rectangular paper sheets having their edges substantially coincident, said sheets being joined together along two opposite sides of the cover by seams each comprising a paper tape folded around the sides and a sewed seam stitched through the tape, and joined along a third side by a gusset adapted when folded to lie flat between the sheets, the gusset consisting of two flat paper strips narrower than the sheets, each one forming a panel of the gusset, the strips being superposed and seamed together flatwise along their inner margin at the inner fold of the gusset and seamed flatwise to the margins of the respective outer sheets at said third side of the cover at the outer folds of the gusset by adhesive between the opposed marginal faces of the respective strips and sheets.

5. The method of making paper covers particularly for use to cover relatively large objects, such as large articles of furniture, comprising the steps of withdrawing two relatively wide continuous webs of paper from individual supplies thereof and causing them to travel in superposed and aligned but spaced apart relation to a combining location where they come together, withdrawing an even-numbered plurality of paper strips all of the same width and narrower than the webs from individual supplies thereof and causing them to travel between the webs in superposed and aligned spaced relation with respect to one another, said strips coming together

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with one another and with said webs at said combining location with the innermost edges of the strips aligned with one another and with the outermost edges of the strips aligned with one another and also with two aligned edges of the webs, applying adhesive to the webs and the strips, as they travel in spaced apart relation to the combining location, adhesively to secure together the strips and webs in such manner that the strips form a gusset joining the webs, segmenting the resultant composite gusseted structure to form individual cover lengths, and seaming each cover length along its two sides transverse to the gusset.

6. The method of making paper covers particularly for use to cover relatively large objects, such as large articles of furniture, comprising the steps of withdrawing two relatively wide continuous webs of paper from individual supplies thereof and causing them to travel in superposed and aligned but spaced apart relation to a combining location where they come together, withdrawing two paper strips of the same width and narrower than the webs from individual supplies thereof and causing them to travel between the webs in superposed and aligned spaced relation with respect to one another, said strips coming together with one another and with said webs at said combining location with the innermost edges of the strips aligned with one another and also with the outermost edges of the strips aligned with one another and with two aligned edges of the webs, applying adhesive to the webs and the strips, as they travel in spaced apart relation to the combining location, adhesively to secure the strips together flatwise at their inner margins and adhesively to secure the outer margin of one strip flatwise to the outer margin of the adjacent web and the outer margin of the other strip flatwise to the outer margin of the other web in such manner that the strips form a two-panel gusset joining the webs, segmenting the resultant composite gusseted structure to form individual cover lengths, and seaming each cover length along its two sides transverse to the gusset.

7. The method of making paper covers particularly for use to cover relatively large objects,

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such as large articles of furniture, comprising the steps of withdrawing two relatively wide continuous webs of paper from individual supplies thereof and causing them to travel in superposed and aligned but spaced apart relation to a combining location where they come together, withdrawing a plurality of pairs of paper strips all of the same width and narrower than the webs from individual supplies thereof and causing them to travel between the webs in superposed and aligned spaced relation with respect to one another, said strips coming together with one another and with said webs at said combining location with the innermost edges of the strips aligned with one another and also with the outermost edges of the strips aligned with one another and with two aligned edges of the webs, applying adhesive to the webs and the strips, as they travel in spaced apart relation to the combining location, adhesively to secure together the strips and webs in such manner that the strips form a gusset joining the webs, segmenting the resultant composite gusseted structure to form individual cover lengths, and seaming each cover length along its two sides transverse to the gusset.

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LEONARD C. THOMAS.

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